

Preliminary Amendment
National Stage of PCT/JP2005/005655
Attorney Docket No. Q85086

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original) A method for producing a (meth)acrylate derivative having an isocyanate group, the method comprising performing dehydrochlorination of a 3-chloropropionate derivative having an isocyanate group, the derivative being represented by the formula (1), in the presence of a basic nitrogen compound having a tertiary nitrogen to prepare a (meth)acrylate derivative having an isocyanate group, the derivative being represented by the formula (2), wherein the tertiary nitrogen of the basic nitrogen compound has at least one group other than an aromatic ring group:



wherein R¹ is a hydrogen atom or a methyl group, R² is an alkylene group of 1 to 10 carbon atoms that may be branched, or a hydrocarbon group in which a cycloalkylene group of 3 to 6 carbon atoms has alkylene groups of 0 to 3 carbon atoms at ends thereof.

2. (original) The method for producing a (meth)acrylate derivative having an isocyanate group according to claim 1, wherein the basic nitrogen compound has a boiling point lower than that of the (meth)acrylate derivative produced.

3. (currently amended) The method for producing a (meth)acrylate derivative having an isocyanate group according to claim 1-~~or 2~~, wherein the basic nitrogen compound is trialkylamine.

4. (original) The method for producing a (meth)acrylate derivative having an isocyanate group according to claim 1, wherein the basic nitrogen compound is insoluble in a reaction solvent.

5. (original) The method for producing a (meth)acrylate derivative having an isocyanate group according to claim 4, wherein the basic nitrogen compound insoluble in a reaction solvent is an ion-exchange resin having a tertiary nitrogen.

6. (currently amended) The method for producing a (meth)acrylate derivative having an isocyanate group according to ~~claim 1-any one of claims 1 to 5~~, wherein the dehydrochlorination is performed at temperatures of 40 to 120°C.

7. (currently amended) The method for producing a (meth)acrylate derivative having an isocyanate group according to ~~claim 1-any one of claims 1 to 6~~, wherein the dehydrochlorination is followed by distillation to remove the residual basic nitrogen compound.

8. (currently amended) The method for producing a (meth)acrylate derivative having an isocyanate group according to ~~claim 1-any one of claims 1 to 7~~, wherein the group R² is an alkylene group of 1 to 10 carbon atoms that may be branched.

9. (original) The method for producing a (meth)acrylate derivative having an isocyanate group according to claim 8, wherein the group R² is –CH₂–CH₂– or –CH₂–CH₂–CH₂–.

10. (currently amended) The method for producing a (meth)acrylate derivative having an isocyanate group according to ~~claim 1-any one of claims 1 to 9~~, wherein the dehydrochlorination is performed in the presence of the basic nitrogen compound in an equivalent amount of 0.5 to 10 moles per mole of alkali decomposable chlorine in a solution that contains the 3-chloropropionate derivative having an isocyanate group of the formula (1).

11. (currently amended) The method for producing a (meth)acrylate derivative having an isocyanate group according to ~~claim 1-any one of claims 1 to 10~~, wherein the hydrolyzable chlorine concentration in the product isolated by simple distillation is not more than 300 ppm.

12. (currently amended) A (meth)acrylate derivative having an isocyanate group, which is obtained by the method described in ~~claim 1-any one of claims 1 to 11.~~

13. (original) The (meth)acrylate derivative having an isocyanate group according to claim 12, wherein the hydrolyzable chlorine concentration is not more than 300 ppm.

14. (original) A method for reducing a hydrolyzable chlorine content, the method comprising treating a solution containing a (meth)acrylate derivative having an isocyanate group, the derivative being represented by the formula (2), and the hydrolyzable chlorine with a basic nitrogen compound having a tertiary nitrogen, wherein the tertiary nitrogen has at least one group other than an aromatic ring group:



wherein R¹ is a hydrogen atom or a methyl group, R² is an alkylene group of 1 to 10 carbon atoms that may be branched, or a hydrocarbon group in which a cycloalkylene group of 3 to 6 carbon atoms has alkylene groups of 0 to 3 carbon atoms at ends thereof.